

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A process of establishing a standard specification for a medicinal plant material, the process comprising:
 - (i) preparing a test solution or test extract of a sample of the medicinal plant material which is known to possess the or each property required for the standard;
 - (ii) submitting the said solution or extract to two or more analytical methods including (a) a combination of NMR spectroscopy and a computer-based pattern recognition technique, and (b) one or more biological profiling techniques which provide a quantifiable measure of the biological effect of the plant and which include a proteomics analysis;
 - (iii) obtaining results from the analytical methods used in step (ii); and
 - (iv) defining a standard specification for the said plant material on the basis of the results obtained in step (iii);

the process being conducted such that the NMR data reflect the totality of the compounds in the plant material which respond to the NMR technique being used.

2. (Currently Amended) A process of providing a sample of a medicinal plant material, which sample complies with a standard specification for that material which has been defined by the process of claim 1, the process comprising:

- (i') preparing a test solution or test extract of a candidate sample of the medicinal plant material;
- (ii') submitting the said solution or extract to two or more analytical methods including analysis by a combination of NMR spectroscopy and a computer-based pattern recognition technique, and (b) one or more biological profiling techniques which provide a quantifiable measure of the biological effect of the plant and which include a proteomics analysis;
- (iii') obtaining results from the analysis of step (ii');
- (iv') selecting the candidate sample if the results in step (iii') comply with the standard specification for the said material established in step (iv) of the process defined in claim 1;

the process being conducted such that the NMR data reflect the totality of the compounds in the plant material which respond to the NMR technique being used.

3. (Original) A process according to claim 2 wherein step (iv') is replaced by:

- (iv'a) submitting the solution or extract prepared in step (i') to one or more biological profiling techniques which provide a quantifiable measure of the biological effect of the plant and which include a proteomics analysis;

(iv'b) obtaining results from the or each technique used in step (iv'a); and
(iv'c) selecting the candidate sample if the results obtained in step (iii') defined in claim 2 and step (iv'b) above comply with the standard specification for the said material as established in step (iv) of the process defined in claim 1.

4. (Previously Presented) A process according to claim 1 wherein the combination of NMR spectroscopy and a computer-based pattern recognition technique comprises:

- (a) submitting the test solution or test extract to NMR spectroscopy and recording one or more NMR spectra; and
- (b) submitting the data obtained from the or each NMR spectrum to a multivariate analysis to generate one or more points on a score plot.

5. (Previously Presented) A process according to claim 1 wherein the multivariate analysis is principal component analysis (PCA).

6. (Previously Presented) A process according to claim 1 wherein the proteomics analysis comprises:

- (i) providing a target cell selected according to the clinical indication in which the medicinal plant is active and incubating the target cells with the test solution or test extract; and

(ii) subjecting the incubated cells to gel electrophoresis on a 2-D gel and observing the change in protein expression in the cells as a result of exposure to the said solution or extract.

7. (Cancelled)

8. (Previously Presented) A process according to claim 1 wherein the medicinal plant material consists of, or is derived from, a whole plant, a part of a plant, a plant extract or a plant fraction.

9. (Original) A process of providing a standard specification for a medicinal plant material, the process comprising:

- (i'') preparing a test solution or test extract of a sample of the said plant material which is known to possess the or each property desired for the standard;
- (ii'') submitting the test solution or test extract to NMR spectroscopy and recording one or more spectra;
- (iii'') submitting the data obtained from the or each said NMR spectrum to a multi-variate analysis to generate one or more points on a score plot; and
- (iv'') defining a sphere of acceptability around the points generated in step (iii'') as the, or as part of the, standard specification for the said plant material;

the process being conducted such that the NMR data reflect the totality of the compounds in the plant material; which respond to the NMR technique being used.

10. (Original) A process according to claim 9 wherein the multivariate analysis of step (iii'') is performed using an unsupervised methodology.

11. (Original) A process of providing a sample of a medicinal plant material, which sample complies with a standard specification for that material which has been established by the process of claim 9, the process comprising:

- (i'') preparing a test solution or test extract of a candidate sample of the said plant material;
- (ii'') submitting the test solution or test extract to NMR spectroscopy and recording one or more NMR spectra;
- (iii'') submitting the data obtained from the or each said NMR spectrum to a multivariate analysis to generate one or more points on a score plot; and
- (iv'') selecting the candidate sample as a sample which complies with the said standard specification only if the points generated on the score plot in step (iii'') fall within a sphere of acceptability as defined in the standard specification established in step (iv'') of the process defined in claim 9;

the process being conducted such that the NMR data reflect the totality of the compounds in the plant material which respond to the NMR technique being used.

12. (Currently Amended) A process according to claim 1 or 9 wherein the plant material is derived from, or consists of, a mixture of two or more different plants.

13. (Original) A process according to claim 12 wherein the said mixture is a remedy from a system of traditional medicine where mixtures of plants or plant extracts are used.

14. (Original) A process according to claim 13 wherein the system of traditional medicine is Traditional Chinese Medicine or Ayurvedic Medicine.

15. (Previously Presented) A process according to claim 1 wherein the sample of the medicinal plant material which possesses said the or each property desired for the standard is a sample of authenticated or audited plant material of which the provenance is known.

16. (New) A process of establishing a standard specification for a medicinal plant material, the process comprising:

- (i) preparing a test solution or test extract of a sample of the medicinal plant material which is known to possess the or each property required for the standard;
 - (ii) submitting the said solution or extract to two or more analytical methods including (a) a combination of NMR spectroscopy and a computer-based pattern recognition technique, and (b) one or more biological profiling techniques which provide a quantifiable measure of the biological effect of the plant and which include a proteomics analysis, said proteomics analysis comprising
 - (a') providing a target cell selected according to the clinical indication in which the medicinal plant is active and incubating the target cells with the test solution or test extract; and
 - (b') subjecting the incubated cells to get electrophoresis on a 2-D gel and observing the change in protein expression in the calls as a result of exposure to the said solution or extract;
 - (iii) obtaining results from the analytical methods used in step (ii); and
 - (iv) defining a standard specification for the said plant material on the basis of the results obtained in step (iii);
- the process being conducted such that the NMR data reflect the totality of the compounds in the plant material which respond to the NMR technique being used.